



South Coast Air Quality Management District



21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

January 27, 2012

Mr. Gerardo Rios
Chief, Permits Office
U.S. EPA – Region IX – Air – 3
75 Hawthorne Street
San Francisco, CA 94105

Dear Mr. *Gerardo Rios*,

Subject: The Termo Company (ID 083508) - Title V Permit Revision

The Termo Company is an oil and gas production facility located in Northridge, CA. They are proposing to revise their Title V permit under Application No. 522646 by the following actions :

Appl. No.	Device No.	Section No.	Proposed action
522640	D44	D	Add new crude oil storage tank.
	D45	D	Add new crude oil storage tank.
	D11	D	Move tank from Roosa lease and convert to wastewater storage.
522642	D46	D	Add new heater treater.
	D47	D	Add new heater treater.
522643	D8	D	Change throughput condition.
	D48	D	Add existing item with new throughput condition.
	D49	H	Add item with new throughput condition.
522644	D2	D	Modify emissions.
	D32	D	Modify emissions.
	D33	D	Modify emissions.
	D34	D	Modify emissions.
522645	-	I	Add Rule 462 Compliance Plan.

January 27, 2012

This proposed revision is considered a "de minimis significant permit revision" to their Title V Facility Permit. The draft Title V permit for the proposed revision is being sent electronically for your review. With your receipt of this proposed Title V permit, we will note that the EPA 45-day review period has begun.

If you have any questions or wish to provide comments regarding these changes, please call the processing engineer, Ms. Maria Vibal at (909) 396-2422 or mvibal@aqmd.gov.

Sincerely,



William C. Thompson, P.E.
Senior Manager
Operations Team
Engineering and Compliance

WCT:GLT:RGC:MV

Enclosures

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION A: FACILITY INFORMATION

LEGAL OWNER &/OR OPERATOR: THE TERMO COMPANY

LEGAL OPERATOR (if different than owner):

EQUIPMENT LOCATION: 1 MI NORTH TAMPA AVE
NORTHRIDGE, CA 91324

MAILING ADDRESS: P O BOX 2767
LONG BEACH, CA 90801

RESPONSIBLE OFFICIAL: NORBERT W. BUSS

TITLE: VICE PRESIDENT

TELEPHONE NUMBER: (562) 595-7401

CONTACT PERSON: RAE LYNNE BLACK

TITLE: PRODUCTION TECHNICIAN

TELEPHONE NUMBER: (562) 595-7401

INITIAL TITLE V PERMIT ISSUED: June 01, 2008

TITLE V PERMIT EXPIRATION DATE: May 31, 2013

TITLE V		RECLAIM	
YES	NOx:	NO	
	SOx:	NO	
	CYCLE:	0	
	ZONE:	COASTAL	

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1: CRUDE OIL/GAS PRODUCTION					
System 1: DEL ALISO/ORGUTT CRUDE OIL/GAS/WATER SEPARATION					
OIL/GAS/WATER SEPARATOR, GAS/LIQUID SEPARATOR, HEIGHT: 11 FT.; DIAMETER: 2 FT 6 IN A/N:	D1				
OIL/GAS/WATER SEPARATOR, GAS/LIQUID, HEIGHT: 12 FT; DIAMETER: 2 FT 6 IN A/N:	D3				
HEATER, HEATER TREATER, NATIONAL, MODEL TYPE IWP, PROCESS GAS, 0.375 MMBTU/HR A/N: 501753	D12			CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 55 PPMV (5) [RULE 1146.2, 5-5-2006]; PM: (9) [RULE 404, 2-7-1986]; PM10: 0.1 GRAINS/100 SCF (5) [RULE 409, 8-7-1981]	B61.1, H23.6
TANK, WASH, FIXED ROOF, CRUDE OIL, VENTED TO VAPOR RECOVERY SYSTEM, 1000 BBL; DIAMETER: 21 FT 6 IN; HEIGHT: 16 FT A/N: 501753	D4				E127.1, E193.2, H23.2, H23.3
STORAGE TANK, FIXED ROOF, NO. 23464, CRUDE OIL, VENTED TO VAPOR RECOVERY SYSTEM, 1000 BBL; DIAMETER: 21 FT 6 IN; HEIGHT: 16 FT A/N: 501753	D5				E127.1, E193.2, H23.2
STORAGE TANK, FIXED ROOF, CRUDE OIL, VENTED TO VAPOR RECOVERY SYSTEM, 400 BBL; DIAMETER: 12 FT; HEIGHT: 20 FT A/N:	D44				E127.1, E193.2, H23.2

- * (1) (1A) (1B) Denotes RECLAIM emission factor
(3) Denotes RECLAIM concentration limit
(5) (5A) (5B) Denotes command and control emission limit
(7) Denotes NSR applicability limit
(9) See App B for Emission Limits
(2) (2A) (2B) Denotes RECLAIM emission rate
(4) Denotes BACT emission limit
(6) Denotes air toxic control rule limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(10) See section J for NESHAP/MACT requirements
- ** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1: CRUDE OIL/GAS PRODUCTION					
STORAGE TANK, FIXED ROOF, CRUDE OIL, VENTED TO VAPOR RECOVERY SYSTEM, 400 BBL; DIAMETER: 12 FT ; HEIGHT: 20 FT A/N:	D45				E127.1, E193.2, H23.2
STORAGE TANK, FIXED ROOF, WASTE WATER, SERVING DEL ALISO/ORCUTT AND ROOSA LEASES, VENTED TO VAPOR RECOVERY SYSTEM, 250 BBL; DIAMETER: 12 FT ; HEIGHT: 16 FT A/N: 501753	D6				E127.1, E193.2, H23.2
STORAGE TANK, FIXED ROOF, WASTE WATER, SERVING DEL ALISO/ORCUTT AND ROOSA LEASES, VENTED TO VAPOR RECOVERY SYSTEM, 250 BBL; DIAMETER: 12 FT ; HEIGHT: 16 FT A/N: 501755	D11				E127.1, E193.2, H23.2
System 2: ROOSA CRUDE OIL /GAS/WATER SEPARATION					
OIL/GAS/WATER SEPARATOR, GAS/LIQUID, HEIGHT: 16 FT ; DIAMETER: 3 FT A/N: 501755	D31				
HEATER, HEATER TREATER, NATCO, MODEL NATIONAL, TYPE VFH-5, PROCESS GAS, 0.38 MMBTU/HR A/N: 501753	D30			CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 55 PPMV (5) [RULE 1146.2, 5-5-2006]; PM: (9) [RULE 404, 2-7-1986]; PM10: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B61.1, H23.6

- * (1) (1A) (1B) Denotes RECLAIM emission factor
 - (3) Denotes RECLAIM concentration limit
 - (5) (5A) (5B) Denotes command and control emission limit
 - (7) Denotes NSR applicability limit
 - (9) See App B for Emission Limits
 - (2) (2A) (2B) Denotes RECLAIM emission rate
 - (4) Denotes BACT emission limit
 - (6) Denotes air toxic control rule limit
 - (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
 - (10) See section J for NESHAP/MACT requirements
- ** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1: CRUDE OIL/GAS PRODUCTION					
HEATER, HEATER TREATER, NATCO, WITH MAXON XPO BURNER, PROCESS GAS, 1 MMBTU/HR A/N:	D46			CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 20 PPMV (5) [RULE 1146.2, 5-5-2006]; PM: (9) [RULE 404, 2-7-1986]; PM10: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B61.1, H23.6
HEATER, HEATER TREATER, NATCO, WITH MAXON XPO BURNER, PROCESS GAS, 1 MMBTU/HR A/N:	D47			CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 20 PPMV (5) [RULE 1146.2, 5-5-2006]; PM: (9) [RULE 404, 2-7-1986]; PM10: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	B61.1, H23.6
STORAGE TANK, FIXED ROOF, CRUDE OIL, VENTED TO VAPOR RECOVERY SYSTEM, 1000 BBL; DIAMETER: 21 FT 6 IN; HEIGHT: 16 FT A/N: 501755	D10				E127.1, E193.2, H23.2
STORAGE TANK, FIXED ROOF, CRUDE OIL, VENTED TO VAPOR RECOVERY SYSTEM, 1000 BBL; DIAMETER: 21 FT 6 IN; HEIGHT: 16 FT A/N: 501755	D14				E127.1, E193.2, H23.2
System 4: (Gas Collection) Vapor Recovery System					
OIL/GAS/WATER SEPARATOR, GAS/LIQUID, HEIGHT: 11 FT; DIAMETER: 2 FT 6 IN A/N: 501756	D2				
OIL/GAS/WATER SEPARATOR, GAS/LIQUID, BALL TRAP, DIAMETER: 4 FT A/N: 501756	D32				

- * (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits (10) See section J for NESHAP/MACT requirements
- ** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

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Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1: CRUDE OIL/GAS PRODUCTION					
OIL/GAS/WATER SEPARATOR, SUCTION SCRUBBER, HEIGHT: 6 FT ; DIAMETER: 1 FT 4 IN A/N: 501756	D33				
OIL/GAS/WATER SEPARATOR, DISCHARGE SCRUBBER, HEIGHT: 4 FT ; DIAMETER: 1 FT A/N: 501756	D34				
System 5: TANK TRUCK LOADING OPERATION					
BULK MATERIAL LOADING STATION, STAND PIPE, 4-INCH DIA., TRUCK LOADING, CRUDE OIL, SERVING DEL ALISO/ORCUTT AND ROOSA LEASES, VENTED TO VAPOR RECOVERY SYSTEM A/N: 501754	D8			VOC: 0.08 LBS/1000 GAL (5) [RULE 462, 5-14-1999]	C1.2, E193.1
Process 2: FUGITIVE EMISSIONS					
FUGITIVE EMISSIONS, COMPRESSORS A/N: 501756	D18				H23.1
FUGITIVE EMISSIONS, VALVES A/N: 501753	D19				H23.1
FUGITIVE EMISSIONS, FITTINGS A/N: 501753	D20				H23.1
FUGITIVE EMISSIONS, FLANGES A/N: 501753	D21				H23.1
FUGITIVE EMISSIONS, PRV A/N: 501753	D22				H23.1
FUGITIVE EMISSIONS, PUMPS A/N: 501754	D23				H23.1
FUGITIVE EMISSIONS, DRAINS A/N: 501753	D24				H23.4

- * (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits (10) See section J for NESHAP/MACT requirements
- ** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 3: R-219 EXEMPT EQUIPMENT SUBJECT TO SOURCE SPECIFIC RULES					
RULE 219 EXEMPT EQUIPMENT, WELL HEADS AND PUMPS, OIL AND GAS	E25				H23.9
RULE 219 EXEMPT EQUIPMENT, SMALL BOILERS, WATER HEATERS AND PROCESS HEATERS, >1 MMBTU/HR AND ≤ 2 MMBTU/HR	E26			PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]	H23.5
RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS	E27			VOC: (9) [RULE 1113, 11-8-1996; RULE 1113, 6-3-2011; RULE 1171, 11-7-2003; RULE 1171, 5-1-2009]	K67.1
RULE 219 EXEMPT EQUIPMENT, EXEMPT HAND WIPING OPERATIONS	E28			VOC: (9) [RULE 1171, 11-7-2003; RULE 1171, 5-1-2009]	
Process 4: INTERNAL COMBUSTION					
GAS TURBINE, UNIT 1, CAPSTONE, MODEL 330, MICRO-TURBINE WITH WASTE HEAT RECOVERY, PROCESS GAS FIRED, 0.42 MMBTU/HR WITH A/N: 501757	D35			CO: 40 PPMV PROCESS GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996]; NOX: 9 PPMV PROCESS GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996]	A195.2, A195.3, A195.4, D29.1, D90.1, K40.1
GENERATOR, UNIT 1, 28 KW					
GAS TURBINE, UNIT 2, CAPSTONE, MODEL 330, MICRO-TURBINE WITH WASTE HEAT RECOVERY, PROCESS GAS FIRED, 0.42 MMBTU/HR WITH A/N: 501758	D37			CO: 40 PPMV PROCESS GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996]; NOX: 9 PPMV PROCESS GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996]	A195.2, A195.3, A195.4, D29.1, D90.1, K40.1
GENERATOR, UNIT 2, 28 KW					

- * (1) (1A) (1B) Denotes RECLAIM emission factor
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(7) Denotes NSR applicability limit
(9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
(4) Denotes BACT emission limit
(6) Denotes air toxic control rule limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(10) See section J for NESHAP/MACT requirements
- ** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 4: INTERNAL COMBUSTION					
GAS TURBINE, UNIT 3, CAPSTONE, MODEL 330, MICRO-TURBINE WITH WASTE HEAT RECOVERY, PROCESS GAS FIRED, 0.42 MMBTU/HR WITH A/N: 501759 GENERATOR, UNIT 3, 28 KW	D39			CO: 40 PPMV PROCESS GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996]; NOX: 9 PPMV PROCESS GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996]	A195.2, A195.3, A195.4, D29.1, D90.1, K40.1
GAS TURBINE, UNIT 4, CAPSTONE, MODEL 330, MICRO-TURBINE WITH WASTE HEAT RECOVERY, PROCESS GAS FIRED, 0.42 MMBTU/HR WITH A/N: 501760 GENERATOR, UNIT 4, 28 KW	D41			CO: 40 PPMV PROCESS GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996]; NOX: 9 PPMV PROCESS GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996]	A195.2, A195.3, A195.4, D29.1, D90.1, K40.1
HEAT EXCHANGER, WASTE HEAT, SERVING FOUR MICRO-TURBINES A/N: 501760	B43				
Process 5: PETROLEUM MARKETING (TANK TRUCK LOADING)					
LOADING ARM, BOTTOM, TANK TRUCK, CRUDE OIL, VENTED TO VAPOR RECOVERY SYSTEM, DIAMETER: 3 IN A/N:	D48				C1.2, E57.1

- * (1) (1A) (1B) Denotes RECLAIM emission factor
(3) Denotes RECLAIM concentration limit
(5) (5A) (5B) Denotes command and control emission limit
(7) Denotes NSR applicability limit
(9) See App B for Emission Limits
- (2) (2A) (2B) Denotes RECLAIM emission rate
(4) Denotes BACT emission limit
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(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
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- ** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION D: DEVICE ID INDEX

**The following sub-section provides an index
to the devices that make up the facility
description sorted by device ID.**

**FACILITY PERMIT TO OPERATE
THE TERMO COMPANY
SECTION D: DEVICE ID INDEX**

Device Index For Section D			
Device ID	Section D Page No.	Process	System
D1	1	1	1
D2	3	1	4
D3	1	1	1
D4	1	1	1
D5	1	1	1
D6	2	1	1
D8	4	1	5
D10	3	1	2
D11	2	1	1
D12	1	1	1
D14	3	1	2
D18	4	2	0
D19	4	2	0
D20	4	2	0
D21	4	2	0
D22	4	2	0
D23	4	2	0
D24	4	2	0
E25	5	3	0
E26	5	3	0
E27	5	3	0
E28	5	3	0
D30	2	1	2
D31	2	1	2
D32	3	1	4
D33	4	1	4
D34	4	1	4
D35	5	4	0
D37	5	4	0
D39	6	4	0
D41	6	4	0
B43	6	4	0
D44	1	1	1
D45	2	1	1
D46	3	1	2

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**FACILITY PERMIT TO OPERATE
THE TERMO COMPANY
SECTION D: DEVICE ID INDEX**

Device Index For Section D			
Device ID	Section D Page No.	Process	System
D47	3	1	2
D48	6	5	0

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

FACILITY CONDITIONS

F9.1 Except for open abrasive blasting operations, the operator shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

(a) As dark or darker in shade as that designated No.1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or

(b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition.

[RULE 401, 3-2-1984; RULE 401, 11-9-2001]

DEVICE CONDITIONS

A. Emission Limits

A195.2 The 9 PPMV NOX emission limit(s) is averaged over 60 minutes at 15 percent oxygen, dry.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D35, D37, D39, D41]

A195.3 The 9 PPMV VOC emission limit(s) is averaged over 60 minutes at 15 percent oxygen, dry.

[RULE 1303(a)(1)-BACT, 5-10-1996]

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : D35, D37, D39, D41]

A195.4 The 40 PPMV CO emission limit(s) is averaged over 60 minutes at 15 percent oxygen, dry.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D35, D37, D39, D41]

B. Material/Fuel Type Limits

B61.1 The operator shall not use gaseous fuels containing the following specified compounds:

Compound	Limit	ppm by volume
Sulfur	greater than	40

The sulfur compounds shall be calculated as hydrogen sulfide. The 40 ppmv limit shall be averaged over a 4 hour period.

[RULE 431.1, 6-12-1998]

[Devices subject to this condition : D12, D30, D46, D47]

C. Throughput or Operating Parameter Limits

C1.2 The operator shall limit the loading rate to no more than 700 barrel(s) in any one day.

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

The operator shall maintain the crude oil transfer equipment such that there are no overfills and no liquid or vapor leaks during disconnect operation.

The operator shall maintain records of daily tank truck loading in gallons per day, back pressure of the vapor recovery system in inches of water column, differential pressure drop data from the recorder and records required by Rule 462. These records shall be kept and maintained for a minimum period of two years, and made available to District personnel upon request.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 462, 5-14-1999]

[Devices subject to this condition : D8, D48]

D. Monitoring/Testing Requirements

D29.1 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
CO emissions	District method 100.1	1 hour	Outlet
NOX emissions	District method 100.1	1 hour	Outlet
oxygen concentration	District method 100.1	1 hour	Outlet
VOC	Approved District method	1 hour	Outlet

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

The test shall be conducted for the initial source test, after approval of the source test protocol. The initial source test shall be conducted on only one of the four turbines. In addition, the source test shall be conducted on a different turbine once every three years.

The test shall be conducted when the equipment is operating at the maximum load. The test results shall be submitted to the AQMD within 60 days after the test date. The AQMD shall be notified about the date and time of the test at least 7 days prior to the test.

The test shall be conducted to demonstrate compliance with Rule 1303 concentration limits.

The test shall be conducted in accordance with an AQMD approved source test protocol. The protocol shall be submitted to the AQMD permit engineer no later than 45 days before the proposed test date and shall be approved by the AQMD before the test commences. The test protocol shall include the proposed operating conditions of the turbine during the tests, the identity of the testing lab, a statement from the lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical procedures.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D35, D37, D39, D41]

D90.1 The operator shall periodically monitor the CO, NOx, and O2 at the turbine exhaust according to the following specifications:

The test shall be conducted yearly for each turbine by the operator or an independent lab using a portable analyzer and in accordance with SCAQMD's document entitled "Testing Guidelines (protocol) for periodic monitoring of CO, NOx, and SOx." The test shall be conducted when the equipment is operating at normal conditions

[RULE 1303(a)(1)-BACT, 12-6-2002]

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : D35, D37, D39, D41]

E. Equipment Operation/Construction Requirements

- E57.1 The operator shall vent this equipment to a vapor recovery system which has been issued a permit to operate by the Executive Officer whenever tank trucks are loaded.

The back pressure in the vapor recovery system shall not exceed 18 inches of water column pressure. A gauge shall be installed and maintained to indicate and record in inches of water column, the back pressure in the vapor recovery line, which vents the tank truck loading system.

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D48]

- E127.1 The operator shall keep gauge/sample hatches closed except during actual gauging/sampling operations.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D4, D5, D6, D10, D11, D14, D44, D45]

- E193.1 The operator shall operate and maintain this equipment according to the following requirements:

The organic vapor displaced during tank truck loading shall be returned to the storage tank from which it is loaded.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D8]

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

E193.2 The operator shall operate and maintain this equipment according to the following requirements:

This equipment shall be vented to the vapor recovery system which is in full use and which has been permitted by the Executive Officer.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D4, D5, D6, D10, D11, D14, D44, D45]

H. Applicable Rules

H23.1 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1173

[RULE 1173, 5-13-1994; RULE 1173, 2-6-2009]

[Devices subject to this condition : D18, D19, D20, D21, D22, D23]

H23.2 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	463

[RULE 463, 5-6-2005]

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : D4, D5, D6, D10, D11, D14, D44, D45]

H23.3 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	464

[RULE 464, 12-7-1990]

[Devices subject to this condition : D4]

H23.4 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1176

[RULE 1176, 9-13-1996]

[Devices subject to this condition : D24]

H23.5 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
NOX	District Rule	1146.2
CO	District Rule	1146.2

[RULE 1146.2, 5-5-2006]

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : E26]

H23.6 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
NOX	District Rule	1146.2

[RULE 1146.2, 5-5-2006]

[Devices subject to this condition : D12, D30, D46, D47]

H23.9 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
TOC	District Rule	1148.1

[RULE 1148.1, 3-5-2004]

[Devices subject to this condition : E25]

K. Record Keeping/Reporting

K40.1 The operator shall provide to the District a source test report in accordance with the following specifications:

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Source test results shall be submitted to the District no later than 60 days after the source test was conducted.

Emission data shall be expressed in terms of concentration (ppmv) corrected to 15 percent oxygen (dry basis), mass rate (lbs/hr), and lbs/MM Cubic Feet. In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.

All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).

All moisture concentration shall be expressed in terms of percent corrected to 15 percent oxygen.

Source test results shall also include the operating conditions of the basic equipment under which the test was conducted.

[RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D35, D37, D39, D41]

K67.1 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

For architectural applications where no thinners, reducers, or other VOC containing materials are added, maintain semi-annual records for all coating consisting of (a) coating type, (b) VOC content as supplied in grams per liter (g/l) of materials for low-solids coatings, (c) VOC content as supplied in g/l of coating, less water and exempt solvent, for other coatings.

For architectural applications where thinners, reducers, or other VOC containing materials are added, maintain daily records for each coating consisting of (a) coating type, (b) VOC content as applied in grams per liter (g/l) of materials used for low-solids coatings, (c) VOC content as applied in g/l of coating, less water and exempt solvent, for other coatings.

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

[Devices subject to this condition : E27]

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 5: PETROLEUM MARKETING (TANK TRUCK LOADING)					
VAPOR RETURN LINE, HOSE, 3 INCH DIAMETER, CONNECTED TO VAPOR RECOVERY SYSTEM, WITH 0.37 INCH DIA. ORIFICE PLATE AND A 2-PEN BARTON RECORDER, MODEL 202A A/N:	D49				D28.1, E57.1

- | | |
|---|---|
| <p>* (1) (1A) (1B) Denotes RECLAIM emission factor
 (3) Denotes RECLAIM concentration limit
 (5) (5A) (5B) Denotes command and control emission limit
 (7) Denotes NSR applicability limit
 (9) See App B for Emission Limits</p> | <p>(2) (2A) (2B) Denotes RECLAIM emission rate
 (4) Denotes BACT emission limit
 (6) Denotes air toxic control rule limit
 (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
 (10) See section J for NESHAP/MACT requirements</p> |
|---|---|
- ** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION H: DEVICE ID INDEX

**The following sub-section provides an index
to the devices that make up the facility
description sorted by device ID.**

**FACILITY PERMIT TO OPERATE
THE TERMO COMPANY**

SECTION H: DEVICE ID INDEX

Device Index For Section H			
Device ID	Section H Page No.	Process	System
D49	1	5	0

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

FACILITY CONDITIONS

F9.1 Except for open abrasive blasting operations, the operator shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

(a) As dark or darker in shade as that designated No.1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or

(b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition.

[RULE 401, 3-2-1984; RULE 401, 11-9-2001]

DEVICE CONDITIONS

D. Monitoring/Testing Requirements

D28.1 The operator shall conduct source test(s) in accordance with the following specifications:

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

The test shall be conducted according to AQMD approved source test protocol. The operator shall submit the source test protocol for AQMD approval at least 60 days prior to the test. The AQMD engineer shall be notified at least 10 days prior to the test date.

The test shall be conducted no later than 120 days after the installation of the vapor monitoring system.

The test shall be conducted when the tank truck loading is conducted at the full capacity and the test shall determine the compliance with Rule 462 limit of 0.08 pound VOC per 1000 gallons loaded.

The test shall be conducted to verify the efficiency of the vapor recovery system by recording the volume of the displaced organic vapor from the tank truck loading operation and the volume recovered in the vapor recovery system.

The test shall be conducted on the vapor return line from the tank truck and shall measure the pressure upstream and down stream of the orifice plate. Simultaneous records of the differential pressure from the orifice plate shall be taken and included in the source test report. The operator shall provide the source test report to the AQMD no later than 60 days after the source test was performed.

[RULE 462, 5-14-1999]

[Devices subject to this condition : D49]

E. Equipment Operation/Construction Requirements

- E57.1 The operator shall vent this equipment to a vapor recovery system which has been issued a permit to operate by the Executive Officer whenever tank trucks are loaded.

The back pressure in the vapor recovery system shall not exceed 18 inches of water column pressure. A gauge shall be installed and maintained to indicate and record in inches of water column, the back pressure in the vapor recovery line, which vents the tank truck loading system.

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D49]

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION I: PLANS AND SCHEDULES

This section lists all plans approved by AQMD for the purposes of meeting the requirements of applicable AQMD rules specified below. The operator shall comply with all conditions specified in the approval of these plans.

Documents pertaining to the plan applications listed below are available for public review at AQMD Headquarters. Any changes to plan applications will require permit modification in accordance with Title V permit revision procedures.

List of approved plans:

Application	Rule
522645	462

NOTE: This section does not list compliance schedules pursuant to the requirements of Regulation XXX - Title V Permits; Rule 3004(a)(10)(C). For equipment subject to a variance, order for abatement, or alternative operating condition granted pursuant to Rule 518.2, equipment specific conditions are added to the equipment in Section D or H of the permit.

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION K: TITLE V Administration

GENERAL PROVISIONS

1. This permit may be revised, revoked, reopened and reissued, or terminated for cause, or for failure to comply with regulatory requirements, permit terms, or conditions. [3004(a)(7)(C)]
2. This permit does not convey any property rights of any sort or any exclusive privilege. [3004(a)(7)(E)]

Permit Renewal and Expiration

3. (A) Except for solid waste incineration facilities subject to standards under section 129(e) of the Clean Air Act, this permit shall expire five years from the date that this Title V permit is issued. The operator's right to operate under this permit terminates at midnight on this date, unless the facility is protected by an application shield in accordance with Rule 3002(b), due to the filing of a timely and complete application for a Title V permit renewal, consistent with Rule 3003. [3004(a)(2), 3004(f)]

(B) A Title V permit for a solid waste incineration facility combusting municipal waste subject to standards under Section 129(e) of the Clean Air Act shall expire 12 years from the date of issuance unless such permit has been renewed pursuant to this regulation. These permits shall be reviewed by the Executive Officer at least every five years from the date of issuance. [3004(f)(2)]
4. To renew this permit, the operator shall submit to the Executive Officer an application for renewal at least 180 days, but not more than 545 days, prior to the expiration date of this permit. [3003(a)(6)]

Duty to Provide Information

5. The applicant for, or holder of, a Title V permit shall furnish, pursuant to Rule 3002(d) and (e), timely information and records to the Executive Officer or designee within a reasonable time as specified in writing by the Executive Officer or designee. [3004(a)(7)(F)]

Payment of Fees

6. The operator shall pay all required fees specified in Regulation III - Fees. [3004(a)(7)(G)]

NOTE: This section does not list compliance schedules pursuant to the requirements of Regulation XXX - Title V Permits; Rule 3004(a)(10)(C). For equipment subject to a variance, order for abatement, or alternative operating condition granted pursuant to Rule 518.2, equipment specific conditions are added to the equipment in Section D or H of the permit.

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION K: TITLE V Administration

Reopening for Cause

7. The Executive Officer will reopen and revise this permit if any of the following circumstances occur:
- (A) Additional regulatory requirements become applicable with a remaining permit term of three or more years. Reopening is not required if the effective date of the requirement is later than the expiration date of this permit, unless the permit or any of its terms and conditions has been extended pursuant to paragraph (f)(4) of Rule 3004.
 - (B) The Executive Officer or EPA Administrator determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
 - (C) The Executive Officer or EPA Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements. [3005(g)(1)]

COMPLIANCE PROVISIONS

8. The operator shall comply with all regulatory requirements, and all permit terms and conditions, except:
- (A) As provided for by the emergency provisions of condition no. 17 or condition no. 18, or
 - (B) As provided by an alternative operating condition granted pursuant to a federally approved (SIP-approved) Rule 518.2.

Any non-compliance with any federally enforceable permit condition constitutes a violation of the Federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or denial of a permit renewal application. Non-compliance may also be grounds for civil or criminal penalties under the California State Health and Safety Code. [3004(a)(7)(A)]

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION K: TITLE V Administration

9. The operator shall allow the Executive Officer or authorized representative, upon presentation of appropriate credentials to:
 - (A) Enter the operator's premises where emission-related activities are conducted, or records are kept under the conditions of this permit;
 - (B) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
 - (C) Inspect at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - (D) Sample or monitor at reasonable times, substances or parameters for the purpose of assuring compliance with the facility permit or regulatory requirements. [3004(a)(10)(B)]
10. All terms and conditions in this permit, including any provisions designed to limit a facility's potential to emit, are enforceable by the EPA Administrator and citizens under the federal Clean Air Act, unless the term or condition is designated as not federally enforceable. Each day during any portion of which a violation occurs is a separate offense. [3004(g)]
11. A challenge to any permit condition or requirement raised by EPA, the operator, or any other person, shall not invalidate or otherwise affect the remaining portions of this permit. [3007(b)]
12. The filing of any application for a permit revision, revocation, or termination, or a notification of planned changes or anticipated non-compliance does not stay any permit condition. [3004(a)(7)(D)]
13. It shall not be a defense for a person in an enforcement action, including those listed in Rule 3002(c)(2), that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit, except as provided for in "Emergency Provisions" of this section. [3004(a)(7)(H)]

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION K: TITLE V Administration

14. The operator shall not build, erect, install, or use any equipment, the use of which, without resulting in a reduction in the total release of air contaminants to atmosphere, reduces or conceals an emission which would otherwise constitute a violation of Chapter 3 (commencing with Section 41700) of Part 4, of Division 26 of the California Health and Safety Code or of AQMD rules. This rule shall not apply to cases in which the only violation involved is of Section 41700 of the California Health and Safety Code, or Rule 402 of AQMD Rules. [408]
15. Nothing in this permit or in any permit shield can alter or affect:
- (A) Under Section 303 of the federal Clean Air Act, the provisions for emergency orders;
 - (B) The liability of the operator for any violation of applicable requirements prior to or at the time of permit issuance;
 - (C) The applicable requirements of the Acid Rain Program, Regulation XXXI;
 - (D) The ability of EPA to obtain information from the operator pursuant to Section 114 of the federal Clean Air Act;
 - (E) The applicability of state or local requirements that are not "applicable requirements", as defined in Rule 3000, at the time of permit issuance but which do apply to the facility, such as toxics requirements unique to the State; and
 - (F) The applicability of regulatory requirements with compliance dates after the permit issuance date. [3004(c)(3)]
16. For any portable equipment that requires an AQMD or state permit or registration, excluding a) portable engines, b) military tactical support equipment and c) AQMD-permitted portable equipment that are not a major source, are not located at the facility for more than 12 consecutive months after commencing operation, and whose operation does not conflict with the terms or conditions of this Title V permit: 1) the facility operator shall keep a copy of the AQMD or state permit or registration; 2) the equipment operator shall comply with the conditions on the permit or registration and all other regulatory requirements; and 3) the facility operator shall treat the permit or registration as a part of its Title V permit, subject to recordkeeping, reporting and certification requirements. [3004(a)(1)]

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION K: TITLE V Administration EMERGENCY PROVISIONS

17. An emergency¹ constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limit only if:
- (A) Properly signed, contemporaneous operating records or other credible evidence demonstrate that:
 - (1) An emergency occurred and the operator can identify the cause(s) of the emergency;
 - (2) The facility was operated properly (i.e. operated and maintained in accordance with the manufacturer's specifications, and in compliance with all regulatory requirements or a compliance plan), before the emergency occurred;
 - (3) The operator took all reasonable steps to minimize levels of emissions that exceeded emissions standard, or other requirements in the permit; and,
 - (4) The operator submitted a written notice of the emergency to the AQMD within two working days of the time when the emissions limitations were exceeded due to the emergency. The notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
 - (B) The operator complies with the breakdown provisions of Rule 430 – Breakdown Provisions, or subdivision (i) of Rule 2004 – Requirements, whichever is applicable. [3002(g), 430, 2004(i)]
18. The operator is excused from complying with any regulatory requirement that is suspended by the Executive Officer during a state of emergency or state of war emergency, in accordance with Rule 118 - Emergencies. [118]

¹ "Emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the operator, including acts of God, which: (A) requires immediate corrective action to restore normal operation; and (B) causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency; and (C) is not caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION K: TITLE V Administration RECORDKEEPING PROVISIONS

19. In addition to any other recordkeeping requirements specified elsewhere in this permit, the operator shall keep records of required monitoring information, where applicable, that include:
- (A) The date, place as defined in the Title V permit, and time of sampling or measurements;
 - (B) The date(s) analyses were performed;
 - (C) The company or entity that performed the analyses;
 - (D) The analytical techniques or methods used;
 - (E) The results of such analyses; and
 - (F) The operating conditions as existing at the time of sampling or measurement. [3004(a)(4)(B)]
20. The operator shall maintain records pursuant to Rule 109 and any applicable material safety data sheet (MSDS) for any equipment claimed to be exempt from a written permit by Rule 219 based on the information in those records. [219(t)]
21. The operator shall keep all records of monitoring data required by this permit or by regulatory requirements for a period of at least five years from the date of the monitoring sample, measurement, report, or application. [3004(a)(4)(E)]

REPORTING PROVISIONS

22. The operator shall comply with the following requirements for prompt reporting of deviations:
- (A) Breakdowns shall be reported as required by Rule 430 – Breakdown Provisions or subdivision (i) of Rule 2004 - Requirements, whichever is applicable.

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION K: TITLE V Administration

- (B) Other deviations from permit or applicable rule emission limitations, equipment operating conditions, or work practice standards, determined by observation or by any monitoring or testing required by the permit or applicable rules that result in emissions greater than those allowed by the permit or applicable rules shall be reported within 72 hours (unless a shorter reporting period is specified in an applicable State or Federal Regulation) of discovery of the deviation by contacting AQMD enforcement personnel assigned to this facility or otherwise calling (800) CUT-SMOG.
 - (C) A written report of such deviations reported pursuant to (B), and any corrective actions or preventative measures taken, shall be submitted to AQMD, in an AQMD approved format, within 14 days of discovery of the deviation.
 - (D) All other deviations shall be reported with the monitoring report required by condition no. 23. [3004(a)(5)]
23. Unless more frequent reporting of monitoring results are specified in other permit conditions or in regulatory requirements, the operator shall submit reports of any required monitoring to the AQMD at least twice per year. The report shall include a) a statement whether all monitoring required by the permit was conducted; and b) identification of all instances of deviations from permit or regulatory requirements. A report for the first six calendar months of the year is due by August 31 and a report for the last six calendar months of the year is due by February 28. [3004(a)(4)(F)]
24. The operator shall submit to the Executive Officer and to the Environmental Protection Agency (EPA), an annual compliance certification. For RECLAIM facilities, the certification is due when the Annual Permit Emissions Program (APEP) report is due and shall cover the same reporting period. For other facilities, the certification is due on March 1 for the previous calendar year. The certification need not include the period preceding the date the initial Title V permit was issued. Each compliance certification shall include:
- (A) Identification of each permit term or condition that is the basis of the certification;

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION K: TITLE V Administration

- (B) The compliance status during the reporting period;
- (C) Whether compliance was continuous or intermittent;
- (D) The method(s) used to determine compliance over the reporting period and currently, and
- (E) Any other facts specifically required by the Executive Officer to determine compliance.

The EPA copy of the certification shall be sent to: Director of the Air Division Attn:
Air-3 USEPA, Region IX 75 Hawthorne St. San Francisco, CA 94105 [3004(a)(10)(E)]

25. All records, reports, and documents required to be submitted by a Title V operator to AQMD or EPA shall contain a certification of accuracy consistent with Rule 3003(c)(7) by a responsible official (as defined in Rule 3000). [3004(a)(12)]

PERIODIC MONITORING

26. All periodic monitoring required by this permit pursuant to Rule 3004(a)(4)(c) is based on the requirements and justifications in the AQMD document "Periodic Monitoring Guidelines for Title V Facilities" or in case-by-case determinations documented in the TitleV application file. [3004(a)(4)]

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION K: TITLE V Administration

FACILITY RULES

This facility is subject to the following rules and regulations

With the exception of Rule 402, 473, 477, 1118 and Rules 1401 through 1420, the following rules that are designated as non-federally enforceable are pending EPA approval as part of the state implementation plan. Upon the effective date of that approval, the approved rule(s) will become federally enforceable, and any earlier versions of those rules will no longer be federally enforceable.

RULE SOURCE	Adopted/Amended Date	FEDERAL Enforceability
RULE 109	5-2-2003	Federally enforceable
RULE 1113	11-8-1996	Federally enforceable
RULE 1113	12-5-2003	Non federally enforceable
RULE 1113	6-3-2011	Non federally enforceable
RULE 1146.2	5-5-2006	Federally enforceable
RULE 1148.1	3-5-2004	Non federally enforceable
RULE 1166	5-11-2001	Non federally enforceable
RULE 1166	7-14-1995	Federally enforceable
RULE 1171	11-7-2003	Federally enforceable
RULE 1171	5-1-2009	Non federally enforceable
RULE 1173	2-6-2009	Non federally enforceable
RULE 1173	5-13-1994	Federally enforceable
RULE 1176	9-13-1996	Federally enforceable
RULE 118	12-7-1995	Non federally enforceable
RULE 1303(a)(1)-BACT	12-6-2002	Non federally enforceable
RULE 1303(a)(1)-BACT	5-10-1996	Federally enforceable
RULE 1303(b)(2)-Offset	12-6-2002	Non federally enforceable
RULE 1303(b)(2)-Offset	5-10-1996	Federally enforceable
RULE 1401	5-2-2003	Non federally enforceable
RULE 1402	3-17-2000	Non federally enforceable
RULE 204	10-8-1993	Federally enforceable
RULE 217	1-5-1990	Federally enforceable

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

SECTION K: TITLE V Administration

RULE SOURCE	Adopted/Amended Date	FEDERAL Enforceability
RULE 219	9-4-1981	Federally enforceable
RULE 3002	11-14-1997	Federally enforceable
RULE 3003	11-14-1997	Federally enforceable
RULE 3003	3-16-2001	Non federally enforceable
RULE 3004	12-12-1997	Federally enforceable
RULE 3004(a)(4)-Periodic Monitoring	12-12-1997	Federally enforceable
RULE 3005	11-14-1997	Federally enforceable
RULE 3005	3-16-2001	Non federally enforceable
RULE 3007	10-8-1993	Federally enforceable
RULE 304	5-11-2001	Non federally enforceable
RULE 401	11-9-2001	Non federally enforceable
RULE 401	3-2-1984	Federally enforceable
RULE 402	5-7-1976	Non federally enforceable
RULE 404	2-7-1986	Federally enforceable
RULE 407	4-2-1982	Federally enforceable
RULE 408	5-7-1976	Federally enforceable
RULE 409	8-7-1981	Federally enforceable
RULE 430	7-12-1996	Non federally enforceable
RULE 431.1	6-12-1998	Federally enforceable
RULE 462	5-14-1999	Federally enforceable
RULE 463	5-6-2005	Federally enforceable
RULE 464	12-7-1990	Federally enforceable
RULE 701	6-13-1997	Federally enforceable

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

APPENDIX B: RULE EMISSION LIMITS [RULE 1113 11-08-1996]

- (1) Except as provided in paragraphs (c)(2), (c)(3), and (c)(4) of Rule 1113, the operator shall not supply, sell, offer for sale, apply, or solicit the application of, any architectural coating which, at the time of sale or manufacture, contains more than 250 grams of VOC per liter of coating (2.08 pounds per gallon), less water, less exempt compounds, and less any colorant added to tint bases, or manufacture, blend, or repackage such a coating for use within the District.
- (2) Except as provided in paragraphs (c)(3) and (c)(4) of Rule 1113, the operator shall not supply, sell, offer for sale, apply, solicit the application of, manufacture, blend, or repackage, for use within the District, any architectural coating listed in the Table of Standards which contains VOC (excluding any colorant added to tint bases) in excess of the corresponding VOC limit specified in the table, after the effective date specified.

TABLE OF STANDARDS

VOC LIMITS

Grams of VOC Per Liter of Coating, Less Water And Less Exempt Compounds

COATING	Limit*	Effective Date of Adoption	Effective 1/1/1998	Effective 1/1/1999	Effective 7/1/2001	Effective 1/1/2005	Effective 7/1/2008
Bond Breakers	350						
Clear Wood Finishes							
Varnish	350						
Sanding Sealers	350						
Lacquer	680		550			275	
Concrete-Curing Compounds	350						
Dry-Fog Coatings	400						
Fire-proofing Exterior	350	450		350			
Coatings							
Fire-Retardant Coatings							
Clear	650						
Pigmented	350						
Flats	250				100		50
Graphic Arts (Sign) Coatings	500						

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

APPENDIX B: RULE EMISSION LIMITS [RULE 1113 11-08-1996]

Industrial Maintenance						
Primers and Topcoats						
Alkyds	420					
Catalyzed Epoxy	420					
Bituminous Coatings	420					
Materials						
Inorganic Polymers	420					
Vinyl Chloride Polymers	420					
Chlorinated Rubber	420					
Acrylic Polymers	420					
Urethane Polymers	420					
Silicones	420					
Unique Vehicles	420					
Japans/Faux Finishing	350	700		350		
Coatings						
Magnesite Cement Coatings	600			450		
Mastic Coatings	300					
Metallic Pigmented Coatings	500					
Multi-Color Coatings	420		250			
Pigmented Lacquer	680		550		275	
Pre-Treatment Wash Primers	780					
Primers, Sealers, and	350					
Undercoaters						
Quick-Dry Enamels	400					
Roof Coatings	300					
Shellac						
Clear	730					
Pigmented	550					
Stains	350					
Swimming Pool Coatings						
Repair	650					
Other	340					
Traffic Coatings	250		150			
Waterproofing Sealers	400					
Wood Preservatives						
Below-Ground	350					
Other	350					

* The specified limits remain in effect unless revised limits are listed in subsequent columns in the Table of Standards

TABLE OF STANDARDS (cont.)

VOC LIMITS

Grams of VOC Per Liter of Material

COATING	Limit
Low-Solids Coating	120

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

APPENDIX B: RULE EMISSION LIMITS [RULE 1113 06-03-2011]

- (1) Except as provided in paragraphs (c)(3), (c)(4), and designated coatings averaged under (c)(6) of Rule 1113, no person shall supply, sell, offer for sale, market, manufacture, blend, repack, apply, store at a worksite, or solicit the application of any architectural coating within the District:
 - (A) That is listed in the Table of Standards 1 and contains VOC (excluding any colorant added to tint bases) in excess of the corresponding VOC limit specified in the table, after the effective date specified; or
 - (B) That is not listed in the Table of Standards 1, and contains VOC (excluding any colorant added to tint bases) in excess of 250 grams of VOC per liter of coating (2.08 pounds per gallon), less water, less exempt compounds, until January 1, 2014, at which time the limit drops to 50 grams of VOC per liter of coating, less water, less exempt compounds (0.42 pounds per gallon).
- (2) No person within the District shall add colorant at the point of sale that is listed in the Table of Standards 2 and contains VOC in excess of the corresponding VOC limit specified in the Table of Standards 2, after the effective date specified.

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

APPENDIX B: RULE EMISSION LIMITS

[RULE 1113 06-03-2011]

TABLE OF STANDARDS 1

VOC LIMITS

**Grams of VOC Per Liter of Coating,
Less Water and Less Exempt Compounds**

COATING CATEGORY	Ceiling Limit ¹	Current Limit ²	Effective Date		
			7/1/08	1/1/12	1/1/14
Bond Breakers		350			
Clear Wood Finishes		275			
Varnish	350	275			
Sanding Sealers	350	275			
Lacquer		275			
Concrete-Curing Compounds		100			
Concrete-Curing Compounds For Roadways and Bridges ³		350			
Concrete Surface Retarder		250			50
Driveway Sealer		100		50	
Dry-Fog Coatings		150			50
Faux Finishing Coatings					
Clear Topcoat		350		200	
Decorative Coatings		350			100
Glazes		350			
Japan		350			
Trowel Applied Coatings		350		150	50
Fire-Proofing Coatings		350			150
Flats	250	50	50		
Floor Coatings	100	50			
Form Release Compound		250			100
Graphic Arts (Sign) Coatings		500			150
Industrial Maintenance (IM) Coatings	420	100			
High Temperature IM Coatings		420			
Non-Sacrificial Anti-Graffiti Coatings		100			
Zinc-Rich IM Primers	340	100			
Magnesite Cement Coatings		450			
Mastic Coatings		300			100
Metallic Pigmented Coatings	500	500			150
Multi-Color Coatings		250			
Nonflat Coatings	150	50			
Pre-Treatment Wash Primers		420			
Primers, Sealers, and Undercoaters	200	100			
Reactive Penetrating Sealers		350			
Recycled Coatings		250			
Roof Coatings	250	50			
Roof Coatings, Aluminum		100			

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

APPENDIX B: RULE EMISSION LIMITS [RULE 1113 06-03-2011]

Roof Primers, Bituminous	350	350			
Rust Preventative Coatings	400	100			
Stone Consolidant		450			
Sacrificial Anti-Graffiti Coatings		100		50	
Shellac					
Clear		730			
Pigmented		550			
Specialty Primers	350	100			
Stains		100			

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

APPENDIX B: RULE EMISSION LIMITS [RULE 1113 06-03-2011]

COATING CATEGORY	Ceiling Limit ¹	Current Limit ²	Effective Date		
			7/1/08	1/1/12	1/1/14
Stains, Interior	250	250			
Swimming Pool Coatings					
Repair		340			
Other		340			
Traffic Coatings		100			
Waterproofing Sealers	250	100			
Waterproofing Concrete/Masonry Sealers	400	100			
Wood Preservatives		350			

1. The specified ceiling limits are applicable to products sold under the Averaging Compliance Option.
2. The specified limits remain in effect unless revised limits are listed in subsequent columns in the Table of Standards.
3. Does not include compounds used for curbs and gutters, sidewalks, islands, driveways and other miscellaneous concrete areas.

TABLE OF STANDARDS 1 (cont.) VOC LIMITS

Grams of VOC Per Liter of Material

COATING	Limit
Low-Solids Coating	120

TABLE OF STANDARDS 2 VOC LIMITS FOR COLORANTS

Grams of VOC Per Liter of Colorant Less Water and Less Exempt Compounds

COLORANT	Limit ⁴
Architectural Coatings, excluding IM Coatings	50
Solvent-Based IM	600
Waterborne IM	50

4. Effective January 1, 2014.

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

APPENDIX B: RULE EMISSION LIMITS [RULE 1171 11-07-2003]

(1) Solvent Requirements

A person shall not use a solvent to perform solvent cleaning operations unless the solvent complies with the applicable requirements set forth below:

SOLVENT CLEANING ACTIVITY	CURRENT LIMITS
	VOC g/l (lb/gal)
(A) Product Cleaning During Manufacturing Process Or Surface Preparation For Coating, Adhesive, Or Ink Application	
(i) General	25 (0.21)
(ii) Electrical Apparatus Components & Electronic Components	500 (4.2)
(iii) Medical Devices & Pharmaceuticals	800 (6.7)
(B) Repair and Maintenance Cleaning	
(i) General	25 (0.21)
(ii) Electrical Apparatus Components & Electronic Components	900 (7.5)

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

APPENDIX B: RULE EMISSION LIMITS [RULE 1171 11-07-2003]

SOLVENT CLEANING ACTIVITY	CURRENT LIMITS
	VOC g/l (lb/gal)
(iii) Medical Devices & Pharmaceuticals	
(A) Tools, Equipment, & Machinery	800 (6.7)
(B) General Work Surfaces	600 (5.0)
(C) Cleaning of Coatings or Adhesives Application Equipment	550 (4.6)
(D) Cleaning of Ink Application Equipment	
(i) General	25 (0.21)
(ii) Flexographic Printing	25 (0.21)
(iii) Gravure Printing	
(A) Publication	750 (6.3)
(B) Packaging	25 (0.21)
(iv) Lithographic or Letter Press Printing	

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

APPENDIX B: RULE EMISSION LIMITS [RULE 1171 11-07-2003]

SOLVENT CLEANING ACTIVITY	CURRENT LIMITS
	VOC g/l (lb/gal)
(A) Roller Wash – Step 1	600 (5.0)
(B) Roller Wash-Step 2, Blanket Wash, & On-Press Components	800 (6.7)
(C) Removable Press Components	25 (0.21)
(v) Screen Printing	750 (6.3)
(vi) Ultraviolet Ink/ Electron Beam Ink Application Equipment (except screen printing)	800 (6.7)
(vii) Specialty Flexographic Printing	600 (5.0)
(E) Cleaning of Polyester Resin Application Equipment	25 (0.21)

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

APPENDIX B: RULE EMISSION LIMITS [RULE 1171 05-01-2009]

(1) Solvent Requirements

A person shall not use a solvent to perform solvent cleaning operations unless the solvent complies with the applicable requirements set forth below:

	CURRENT LIMITS*	EFFECTIVE 1/1/2010
SOLVENT CLEANING ACTIVITY	VOC g/l (lb/gal)	VOC g/l (lb/gal)
(A) Product Cleaning During Manufacturing Process Or Surface Preparation For Coating, Adhesive, Or Ink Application		
(i) General	25 (0.21)	
(ii) Electrical Apparatus Components & Electronic Components	100 (0.83)	
(iii) Medical Devices & Pharmaceuticals	800 (6.7)	
(B) Repair and Maintenance Cleaning		
(i) General	25 (0.21)	
(ii) Electrical Apparatus Components & Electronic Components	100 (0.83)	

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

APPENDIX B: RULE EMISSION LIMITS [RULE 1171 05-01-2009]

	CURRENT LIMITS*	EFFECTIVE 1/1/2010
SOLVENT CLEANING ACTIVITY (cont.)	VOC g/l (lb/gal)	VOC g/l (lb/gal)
(iii) Medical Devices & Pharmaceuticals		
(A) Tools, Equipment, & Machinery	800 (6.7)	
(B) General Work Surfaces	600 (5.0)	
(C) Cleaning of Coatings or Adhesives Application Equipment	25 (0.21)	
(D) Cleaning of Ink Application Equipment		
(i) General	25 (0.21)	
(ii) Flexographic Printing	25 (0.21)	
(iii) Gravure Printing		
(A) Publication	100 (0.83)	
(B) Packaging	25 (0.21)	
(iv) Lithographic (Offset) or Letter Press Printing		
(A) Roller Wash, Blanket Wash, & On-Press Components	100 (0.83)	

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

APPENDIX B: RULE EMISSION LIMITS [RULE 1171 05-01-2009]

	CURRENT LIMITS*	EFFECTIVE 1/1/2010
SOLVENT CLEANING ACTIVITY (cont.)	VOC g/l (lb/gal)	VOC g/l (lb/gal)
(B) Removable Press Components	25 (0.21)	
(v) Screen Printing	100 (0.83)	
(vi) Ultraviolet Ink/ Electron Beam Ink Application Equipment (except screen printing)	650 (5.4)	100 (0.83)
(vii) Specialty Flexographic Printing	100 (0.83)	
(E) Cleaning of Polyester Resin Application Equipment	25 (0.21)	

* The specified limits remain in effect unless revised limits are listed in subsequent columns.

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

APPENDIX B: RULE EMISSION LIMITS [RULE 404 02-07-1986]

The operator shall not discharge into the atmosphere from this equipment, particulate matter in excess of the concentration at standard conditions, shown in Table 404(a).

Where the volume discharged is between figures listed in the Table, the exact concentration permitted to be discharged shall be determined by linear interpolation.

For the purposes of this rule, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.

TABLE 404(a)

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter" Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot	Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot
25 or less	883 or less	450	0.196	900	31780	118	0.0515
30	1059	420	.183	1000	35310	113	.0493
35	1236	397	.173	1100	38850	109	.0476
40	1413	377	.165	1200	42380	106	.0463
45	1589	361	.158	1300	45910	102	.0445

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

APPENDIX B: RULE EMISSION LIMITS [RULE 404 02-07-1986]

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot	Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot
50	1766	347	.152	1400	49440	100	.0437
60	2119	324	.141	1500	52970	97	.0424
70	2472	306	.134	1750	61800	92	.0402
80	2825	291	.127	2000	70630	87	.0380
90	3178	279	.122	2250	79460	83	.0362
100	3531	267	.117	2500	88290	80	.0349
125	4414	246	.107	3000	105900	75	.0327
150	5297	230	.100	4000	141300	67	.0293
175	6180	217	.0947	5000	176600	62	.0271
200	7063	206	.0900	6000	211900	58	.0253
250	8829	190	.0830	8000	282500	52	.0227
300	10590	177	.0773	10000	353100	48	.0210
350	12360	167	.0730	15000	529700	41	.0179
400	14130	159	.0694	20000	706300	37	.0162
450	15890	152	.0664	25000	882900	34	.0148

FACILITY PERMIT TO OPERATE THE TERMO COMPANY

APPENDIX B: RULE EMISSION LIMITS [RULE 404 02-07-1986]

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter" Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot	Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot
500	17660	146	.0637	30000	1059000	32	.0140
600	21190	137	.0598	40000	1413000	28	.0122
700	24720	129	.0563	50000	1766000	26	.0114
800	28250	123	.0537	70000 or more	2472000 or more	23	.0100

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING AND COMPLIANCE
APPLICATION PROCESSING AND CALCULATIONS

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APPL. NO. 522645
PROCESSED BY MV02
CHECKED BY
DATE 12/19/2011

EVALUATION REPORT FOR RULE 462 COMPLIANCE PLAN

APPLICANT'S NAME: The Termo Company (Fac. ID 083508)

MAILING ADDRESS: P O Box 2767
Long Beach, CA 90801

EQUIPMENT LOCATION: 1 mile North of Tampa Avenue
Northridge, CA 91324

CONTACT : Rae Lynne Black
HSE Specialist
Tel: (562) 595-7401

BACKGROUND:

The Termo Company operates the Aliso Canyon oil and gas production facility to process crude oil, gas and water (o/g/w) produced from subsurface oil wells in the surrounding areas. The company operates the Del Aliso/Orcutt and Roosa leases at this site. Under the proposed permit applications, the site will increase its production to 700 bbls per day of crude oil and 1,450 bbls per day of produced water (see attached permit evaluation for the modifications and Title V facility permit revision). Per Rule 462, this Termo Company location will be classified as a Class "A" facility and subject to Rule 462(d)(1). As such, the facility is required to equip its vapor recovery/control system with a Continuous Monitoring System (CMS) that is approved by the District. Under 462(e)(1)(B) the facility is required to submit to the District a CMS Plan for approval. The CMS is required, under 462(f)(2) to be in compliance with Code of Federal Regulations Title 40 Part 63 Subpart R Section 63.427 and Code of Federal Regulations Title 40 Part 60 Appendix B, as applicable.

The location has an existing vapor recovery system which does not conform with the requirement for a Continuous Monitoring System (CMS). Termo Company submitted an application to equip the vapor recovery system with the CMS consisting of an orifice meter and chart recorder to measure the vapors displaced from the tank truck loading operations (AN 522643). The proposed increase in crude oil throughput is also covered by AN 522643.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
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Rule 462 provides requirements for Class "A" facilities as discussed below. This permit application for a Compliance plan was submitted to show how Termo Company will achieve compliance.

EMISSIONS CALCULATIONS:

Refer to the attached permit evaluation.

RULES EVALUATION:

462(d) – Loading Requirements at Class "A" Facilities

Compliance is expected from the facility as shown below:

(d)(1)(A)(ii) – The facility is required to be equipped with a District-approved vapor recovery and/or disposal system only when such system does not require California Air Resources Board (CARB) certification pursuant to Health and Safety Code 41954.

(d)(1)(B) - The vapor recovery and/or disposal system is required to be equipped with a Continuous Monitoring System (CMS) that is installed, operated, and maintained according to the manufacturer's specifications and is approved by the Executive officer.

(d)(1)(C) – The transfer of organic liquids is required to be accomplished in such a manner that the displaced organic vapors and air are vented under design conditions to the vapor recovery and/or disposal system.

In order to comply with the above subsections of Rule 462, Termo Company is proposing to modify its existing vapor recovery system to add a CMS consisting of an orifice meter and chart recorder to measure the vapors displaced from tank trucks during loading operations. Permit application 522643 is pending to accommodate this modification. Based on the applicant's proposal, the system will be tested to show compliance. The truck loading vapor recovery system captures hydrocarbons from the air/vapor mixture displaced during the loading of crude oil into tank trucks and transports them back to the storage tanks. During the loading operations all vapors displaced from the tank truck will pass through the orifice meter in the vapor recovery piping to enable monitoring and quantification.

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(d)(1)(D) – This subsection requires the vapor recovery and/or disposal system to reduce the VOC emissions to 0.08 pound or less per thousand gallons (10 grams per 1,000 liters) of organic liquid transferred. Compliance will be demonstrated by a source test that will be conducted for the vapor recovery and/or disposal system no later than four months after the installation of such system. This requirement will be a permit condition under A/N 522643.

(d)(1)(F) – This subsection requires that the transfer equipment be vapor tight and that there be no overfills or liquid leaks. Based on the applicant's proposal, a leak test will be conducted during the source test. Tank truck domes and tank pressure vacuum valves will also be monitored for vapor tightness. Termo Company also maintains a Rule 1173 inspection and monitoring plan to minimize leaks at the facility.

(d)(1)(G) – This subsection requires that the backpressure in the vapor recovery and/or disposal system not exceed 18 inches of water column pressure. The facility will be required to install a gauge that will record the backpressure in the vapor recovery line which vents the tank truck loading system. This requirement will be a permit condition under A/N 522643.

(d)(6)(A) and B – Leak Inspection Requirements

Termo Company employs the services of Avanti Environmental to conduct leak inspections and maintain the program.

462(g) – Recordkeeping

Termo Company will keep and maintain records at the facility as required by this section of the rule. Such records shall be maintained for at least two years and will be available upon request to District personnel.

CONCLUSIONS & RECOMMENDATIONS:

Approve the Rule 462 Compliance Plan and include the approval in the Title V facility permit.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION APPLICATION EVALUATION AND CALCULATIONS	No. of Pages 17	Page No. 1
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PERMIT TO OPERATE

OWNER/OPERATOR: The Termo Company

CONTACT: Ms Rae Lynne Black

COMPANY ID: 083508

EQUIPMENT LOCATION: 1 mile North of Tampa Avenue, Northridge, CA 91324

EQUIPMENT DESCRIPTION: A/Nos. 522640, 522642-646

Crude Oil/Gas production, Del Aliso/Orcutt Lease [A/N 522640]

Crude Oil/Gas production, Roosa Lease [A/N 522642]

Tank Truck Loading Operation [A/N 522643]

1. Loading Arm, Bottom Loading, Tank Truck, Dia. 3", connected to Vapor Recovery System [D1]
2. Vapor Return Hose, Dia. 3", connected to Vapor Recovery System {Device Dxx}
3. Orifice Plate, with 0.37" Diameter Bore, 0-100 psi static range
4. 2-Pen Differential Pressure Recorder, ITT Barton, Model 202A,

Note:- Vapor return hose is an existing item but not listed in the facility permit. The new items, Orifice plate and 2-pen recorder, are added to the tank truck loading system to make it compliant with R-462 requirements. These 2 items will be added to the vapor return hose's device description under comments as FP device's dropdown list does not have the provision to describe them

Vapor Recovery System [A/N 522644]

Rule 462 Compliance Plan [A/N 522645]

Amend the Title V Permit [A/N 522646]

Please see next page for equipment description.

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FACILITY PERMIT SECTION D					
Equipment	ID No.	Connected to	Source Type	Emissions	Equipment Specific Condition
PROCESS 1:- CRUDE OIL GAS PRODUCTION					
System 1:- Del Aliso/Orcutt Crude Oil/Gas/Water Separation:					
Oil/Gas/Water Sep., Gas/Liquid, Del Aliso Separator, 2' – 6" Dia. x 11' H. A/N 501753 522640	D1				
Oil/Gas/Water Sep., Gas/Liquid, 2' – 6" Dia. x 12' H. A/N 501753 522640	D3				
Heater, Treater, National Type, IWP, Natco Burner, 0.375 mmbtu/hr, process gas A/N 501753 522640	D12			CO: 2000 ppmv, (5) [Rule 407, 4-2-1982]; PM: 0.1 Grains/SCF (5) [Rule 409, 8-7-1981]; PM (9) [Rule 404, 2-7-1986]; NOx: 55 ppmv (5) [Rule 1146.2, 5-5-2006]	B61.1, H23.6
Tank, Wash, Fixed Roof, Crude Oil/water, Vented to Gas Collection-Vapor Recovery System, 1,000 BBL, 21' – 6" Dia. x 16' H. A/N 501753 522640	D4				E127.1, E193.2, H23.2, H23.3
Storage Tank, Fixed Roof, No. 23464, Crude Oil, Vented to Gas Collection-Vapor Recovery System, 1,000 BBL, 21' – 6" Dia. x 16' H. A/N 501753 522640	D5				E127.1, E193.2, H23.2,
Storage Tank, Fixed Roof, Crude Oil, Vented to Gas Collection-Vapor Recovery System, 400 BBL, 12' Dia. x 20' H. A/N 522640	D44			New Tank	E127.1, E193.2, H23.2,
Storage Tank, Fixed Roof, Crude Oil, Vented to Gas Collection-Vapor Recovery System, 400 BBL, 12' Dia. x 20' H. A/N 522640	D45			New Tank	E127.1, E193.2, H23.2,
Storage Tank, Fixed Roof, Wastewater, Serving Del Aliso/ Orcutt and Roosa Leases, Vented to Gas Collection-Vapor Recovery System, 250 BBL, 12' Dia. x 16' H. A/N 501753 522640	D6				E127.1, E193.2, H23.2
Storage Tank (Standby), Fixed Roof, Wastewater, Serving Del Aliso/ Orcutt and Roosa Leases, Vented to Vapor Recovery System, 250 BBL, 12' Dia. x 16' H. A/N 501755 522640	D11			Moved from Roosa Lease	E127.1, E193.2, H23.2

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FACILITY PERMIT SECTION D					
Equipment	ID No.	Connected to	Source Type	Emissions	Equipment Specific Condition
PROCESS 1:- CRUDE OIL GAS PRODUCTION					
System 2:- Roosa Crude/Oil/Gas Separation					
Oil/Gas/Water Sep., Gas/Liquid Separator, 3' Dia. x 16' H. A/N 501755 522642	D31				
Heater Treater, Natco Burner, National Type VFH-5, Process Gas, 0.38 mmbtu/hr A/N 501755 522642	D30			CO: 2000 ppmv, (5) [Rule 407, 4-2-1982]; NOx: 55 ppmv (5) [Rule 1146.2, 5-5-2006], PM: 0.1 gr/scf (5) [Rule 409, 8-7-1981, PM (9) [Rule 404, 2-7-1986];	B61.1, H23.6
Heater Treater, Natco, Maxon XPO Burner, Process Gas, 1.0 mmbtu/hr A/N 522642	D46			CO: 2000 ppmv, (5) [Rule 407, 4-2-1982]; NOx: 20 ppmv (5) [Rule 1146.2, 5-5-2006], PM: 0.1 gr/scf (5) [Rule 4098-7-1981, PM (9) [Rule 404, 2-7-1986];	B61.1, H23.6
Heater Treater, Natco, Maxon XPO Burner, Process Gas, 1.0 mmbtu/hr A/N 522642	D47			CO: 2000 ppmv, (5) [Rule 407, 4-2-1982]; NOx: 20 ppmv (5) [Rule 1146.2, 5-5-2006], PM: 0.1 gr/scf (5) [Rule 4098-7-1981, PM (9) [Rule 404, 2-7-1986];	B61.1, H23.6
Storage Tank, Fixed Roof, Crude Oil,, Vented to Vapor Recovery System, 1,000 BBL, 21' – 6" Dia. x 16' H. A/N 501755 522642	D10				E127.1, E193.2, H23.2
Storage Tank, Fixed Roof, Crude Oil,, Vented to Vapor Recovery System,, 1,000 BBL, 21' – 6" Dia. x 16' H. A/N 501755- 522642	D14				E127.1, E193.2, H23.2

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FACILITY PERMIT SECTION D					
Equipment	ID No.	Connected to	Source Type	Emissions	Equipment Specific Condition
PROCESS 1:- CRUDE OIL GAS PRODUCTION					
System 4:- (Gas Collection) Vapor Recovery System					
Oil/Gas/Water Sep, Gas/Liquid Separator, Pressure Vessel. 2' – 6" Dia. x 11' H. A/N 501756- 522644	D2				
Oil/Gas/Water Sep, Gas/Liquid, Ball Trap, 4' Diameter A/N 501756- 522644	D32				
Gas/Liquid Separator, Scrubber, Suction, 1' – 4" Dia. x 6' H. A/N 501756- 522644	D33				
Gas/Liquid Separator, Discharge Scrubber, Discharge, 1' Dia. x 4' H. A/N 501756- 522644	D34				

Note:- The addition of orifice plate and associated equipment are described under tank truck loading operation (System 5) as it relates to that operation.

FACILITY PERMIT SECTION D					
Equipment	ID No.	Connected to	Source Type	Emissions	Equipment Specific Condition
PROCESS 1:- CRUDE OIL GAS PRODUCTION					
System 5:- Tank Truck Loading Operation					
Bulk Material Loading Station, Stand pipe, 4 In. Dia., Tank Truck Loading, Crude Oil, Serving Del Aliso, Orcutt and Roosa Leases, vented to Vapor Recovery System A/N 501754 522643	D8			VOC: 0.08 lbs/1000 gal [Rule 462, 5-11-1999]	E193.1, C1.1, C1.2

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SECTION- D:- Permit to Construct/Permit to Operate

Equipment	Id No.	Connected to	RECLAIM Source Type/Monitoring Unit	Emissions & Requirements	Conditions
Process 3: PETROLEUM MARKETING (TANK TRUCK LOADING)					
Loading Arm, Bottom, Tank Truck, Crude Oil, Diameter 3 In., vented to Vapor Recovery System A/N 501754 522643	Dxx				C1.1, C1.2, E57.1, K48.1

Section H: Permit to Construct and Temporary Permit to Operate

Process 3: PETROLEUM MARKETING (TANK TRUCK LOADING)					
<u>Vapor Return Hose, Diameter 3 In., connected to Vapor Recovery System, with orifice plate, 0.37" Dia. and 2-pen Barron Recorder</u> A/N 501754 522643	<u>Dxx</u>		Existing device but was not listed previously		<u>D28.1,</u> E57.1
A/N 522646	Facility Permit modification per above alterations				

Note:- The above equipment description and permit conditions at the end are for information only. Please see the facility permit for equipment description and actual permit conditions.

BACKGROUND:

The Termo Company operates the Aliso Canyon oil and gas production facility to process crude oil, gas and water (o/g/w) produced from subsurface oil wells in the surrounding areas. From three leases, Del Aliso, Roosa and Orcutt, the current production is about 200 BBLS of oil per day and about 600 BBLS of water per day. The facility is operating under the existing permits [2 oil/water/gas separation permits (Del Aliso/Orcutt, No. G13872 (A/N 501753), Roosa, No. G13732 (A/N 501755), No. G13733 (A/N 501756) for gas gathering system, and No. G13875 (A/N 501754) for Tank Truck Loading Station]. The facility is located in a remote area approximately 1 mile north-northwest of Tampa Avenue in Northridge, CA.

Termo got its Initial Title V permit in May 2008 which is valid through 2013. This facility is not subject to RECLAIM.

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BACKGROUND: contd.

Termo is drilling new oil wells to increase oil production at Aliso Canyon oil field. It is anticipated that oil production will increase up to 700 bbl per day and the produced water will increase to 1,450 bbls per day. Termo is proposing to add two new crude oil storage tanks to the Del Aliso/Orcutt O/G/W separation system and move a 250-bbl stand-by tank (D11) from Roosa o/g/w separation system to provide additional capacity in the wastewater handling system. Two new heater treaters will be added to Roosa o/g/w separation system. Termo also wants to add continuous monitoring system for its tank truck loading system to comply with the R-462 [bulk loading, Class A facility]. These are Class 1 applications and P/C P/O will be issued.

The proposed modification is described above with underlined description.

PROCESS DESCRIPTION:

Termo continues to perform the same function of processing the crude oil, gas and water produced from the subsurface wells in the Aliso canyon oil field. The produced crude oil is sold and transported via tank truck to petroleum refineries as feed stock. The water is sent to the gas company to re-inject back into underground reservoirs. The produced gas is used to fuel the process heaters and recently installed four micro-turbines and the excess gas is sent to the pipeline for sale. Two new compressors are installed to enable the vapor recovery from the crude oil storage tanks and sale of the excess gas to the pipeline. The new tanks and added heater treaters will provide the needed capacity for o/g/w separation. The continuous monitoring system will monitor tank truck loading system's compliance with R-462 requirements [0.08 lb/1000 gallon loaded].

The equipment changes made to accommodate the increase in production volumes are shown on the process flow diagrams [please see the applicant's folder, Appendix 3].

EMISSION CALCULATIONS:

Facility's criteria pollutants' emissions will increase due to the installation of the proposed project. The new emission sources are: 2 new tanks (ROG emissions) in Del Aliso Crude oil production system, increase in combustion related pollutants from 2 new heaters in Roosa Lease, ROG emission increase due to increase in throughput through tank truck loading system and fugitive ROG emissions from new valves, flanges, connectors etc.

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Table 1:- ROG emissions from Tanks, Del Aliso/orcutt Lease [A/N 522640]

Tank	ROG Emissions			
	lbs/hr, uncntrl. [cntrl]	lbs/day, uncntrl.[cntrl]	30-day avg.,lbday	lbs/yr
Existing				
D4, Wash Tank	0.16 [0.008]	3.83 [0.192]		70
D5 Storage Tank	0.792 [0.040]	19.0 [0.95]		347
D6, Wastewater Tk	0.0295 [0.0015]	0.709 [0.035]		13
Total	0.982 [0.0495]	23.54 [1.177]	1.0	430
Addition of New Tanks				
D44, New tank	0.387 [0.0193]	9.28 [0.464]		169
D45, New tank	0.387 [0.0193]	9.28 [0.464]		169
D11, Wastewater Tk	0.0295 [0.0015]	0.709 [0.035]		13
Total Increase	0.804 [0.0401]	19.27 [0.963]	1	351
Modified unit's Emiss. (tanks)	1.786 [0.0895]	42.87 [2.14]	2	781

Table 2:- Post Modification Fugitive VOC Emissions: Del Aliso/Orcutt Lease (A/N 522640)

Components	Total Count [delta increase]	Emission Factor lb/hr/source	Emissions [delta increase]		
			lb/hr	lb/day	lb/yr
Connectors, Gas/Lt. Liquid	277 [18]	2.70E-05	0.00049	0.012	4
Connectors, Lt. Crude	332 [105]	4.71E-06	0.00049	0.012	4
Flanges, Gas/Lt. Liquid	37 [9]	1.33E-05	0.00012	0.0029	1
Flanges, Lt. Crude	22 [3]	1.13E-05	0.00003	0.0008	0
Others, Gas/Lt. Liquid	20 [3]	1.03E-03	0.0031	0.0744	27
Others, Lt. Crude	18 [3]	6.20E-05	0.00019	0.0045	2.0
Valves, Gas/Lt. Liquid	32 [12]	1.65E-05	0.0002	0.0048	2
Valves, Lt. Crude	34 [0]	8.98E-06	0	0	0
Total post modification fugitive VOC emission (delta increase)			0.00457	0.1096	40

Note:- The above fugitive emissions data in Table 9A is provided by the applicant (please see the details in the folder, Appendix 5 dated 04/13/2011). The emission factors are based on Maximum Weighted Average Quarterly Emission Factors. due to the addition of 2 new tanks, Del Aliso's fugitive components have increase by 153 counts and the fugitive emissions by 40 lbs/yr. Modified unit's total fugitive emission = 305 (existing) + 40 = 345 lbs/yr

Table 3:-Total ROG emissions Modified Del Aliso Permit unit [A/N 522640]

source	ROG Emissions			
	lbs/hr, uncntrl. [cntrl]	lbs/day, uncntrl.[cntrl]	30-day avg.,lbday	lbs/yr
Tanks	1.786 [0.0895]	42.87 [2.14]	2	781
Fugitive	0.0404	0.97	1	345
Total	1.88 [0.13]	43.84 [3.14]	3	1126

Del Aliso 's heater's [Device D12, 0.375 mmbtu/hr] emissions will remain the same.

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Toxic Analysis for Del Aliso/Orcutt Lease modification:

The proposed modification [2 new tanks and more fugitive components] has resulted in ROG emission increase of 351 lbs/yr from tanks, and 40 lbs/yr of TOG from fugitive components. Based on gas analysis and default toxic air contaminant (TAC) values for crude oil, applicant has estimated the TAC emissions and performed the health risk. The table below shows the summary of this analysis [details are given in applicant provided data in Appendices 6 and 7].

Table 4:- Del Aliso/Orcutt Toxic Analysis Summary [Tanks and Fugitives]

Toxicant	Screening Level		Emissions		Pollutant Screening Level	
	Acute	Cancer/chronic	lb/hr	lbs/yr	Acute	Cancer/chronic
	lb/hr @ 100 Meters	lb/yr @ 100 Meters				
Benzene	3.96E+00	8.92E+00	3.41E-04	2.98	8.60E-05	3.35E-01
Ethyl benzene	----	5.17E+05	1.74E-04	1.53	n/a	2.95E-06
Hexane	----	1.81E+06	1.61E-04	1.41	n/a	7.77E-07
Toluene	9.91E+01	7.75E+04	5.22E-04	4.57	5.26E-06	5.90E-05
Xylene	5.89E+01	1.81E+05	6.24E-04	5.47	1.06E-05	3.02E-05
Application Screening Index (ASI) =					0.0001	0.3346

Permit unit total ASI is less than 1

Roosa Lease [A/N 522642]

Per the proposed modification, Roosa's tank D11 is moved to Del Aliso lease which will reduce tanks' ROG emissions, and addition of 2 new heaters will have increase of all criteria pollutants from combustion. There will be also increase in fugitive ROG emissions.

Table 5:- ROG emissions from Tanks, Roosa Lease [A/N 522642]

Tank	ROG Emissions			
	lbs/hr, uncntrl. [cntrl]	lbs/day, uncntrl. [cntrl]	30-day avg., lb/day	lbs/yr
Existing				
D10, Wash Tank	0.947 [0.0473]	22.73 [1.14]		415
D14Storage Tank	0.947 [0.0473]	22.73 [1.14]		415
D11, Wastewater Tk	0.247 [0.0124]	5.94 [0.297]		108
Total	2.141 [0.107]	51.40 [2.570]	3.0	938
Removal of Tank D11				
D10, Wash Tank	0.947 [0.0473]	22.73 [1.14]		415
D14Storage Tank	0.947 [0.0473]	22.73 [1.14]		415
D11, Wastewater Tk (delete)	0.247 [0.0124]	5.94 [0.297]		108
Modified unit's Total (tanks)	1.894 [0.0946]	45.46 [2.28]	2	830

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Table 6:- Post Modification Fugitive VOC Emissions: Roosa Lease (A/N 522642)

Components	Total Count [delta increase]	Emission Factor lb/hr/source	Emissions [delta increase]		
			lb/hr	lb/day	lb/yr
Connectors, Gas/Lt. Liquid	216 [88]	2.70E-05	0.00238	0.057	21
Connectors, Lt. Crude	377 [25]	4.71E-06	0.00012	0.0028	1
Flanges, Gas/Lt. Liquid	26 [-3]	1.33E-05	-0.00004	-0.00096	-0.3 [0]
Flanges, Lt. Crude	76 [-1]	1.13E-05	-0.00001	-0.00031	-0.1 [0]
Others, Gas/Lt. Liquid	15 [3]	1.03E-03	0.00309	0.0742	27
Others, Lt. Crude	36 [-1]	6.20E-05	-0.000062	-0.0015	-0.55 [0]
Valves, Gas/Lt. Liquid	18 [4]	1.65E-05	0.00007	0.0016	0.58 [0]
Valves, Lt. Crude	66 [2]	8.98E-06	0.000018	0.00043	0.16 [0]
Total post modification fugitive VOC emission (delta increase)			0.00457	0.1096	49

Note:- The above fugitive emissions data in Table 5 is provided by the applicant (please see the details in the folder, Appendix 5 dated 04/13/2011). The emission factors are based on Maximum Weighted Average Quarterly Emission Factors. Due to the proposed modification, Roosa's fugitive components have increase by 67 counts and the fugitive emissions by 49 lbs/yr. Modified unit's total fugitive emission = 856 (existing) + 49 = 905 lbs/yr

Table 7:- ROG emissions(tanks + Fugi.) Modified Roosa Permit unit [A/N 522642]

source	ROG Emissions			
	lbs/hr, uncntrl. [cntrl]	lbs/day, uncntrl. [cntrl]	30-day avg. lbday	lbs/yr
Tanks	1.894 [0.0946]	45.46 [2.28]	2	830
Fugitive	0.103	2.48	3	905
Total	1.997 [0.1976]	47.94 [4.76]	5	1735

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Combustion Emissions Roosa's Heater treater and 2 new Heaters [device D12, D46, D47]

Table 8:- Criteria Pollutants' Emissions from the Roosa's Heater Treater (0.380 mmbtu/hr)

Pollutant	Emission Factor lbs/mmcf	Maximum Emissions Existing		
		lb/hr	lbs day	lbs/yr
CO	35	0.0119	0.286	104
NOx	130	0.0442	1.061	387
PM ₁₀	7.5	0.0026	0.0612	22
ROG	7.00	0.0024	0.0571	21
SOx	0.60	0.00020	0.0049	2

+ 2 new heaters [total Heat Input = 2 mmbtu/hr [(2 mmbtu/hr)/1180 btu/cf = 0.001695 mmcf/hr]

CO	50 ppm (mfg. warrantee)	0.0742 (calc. frm F-factor)	1.78	650
NOx	9 ppm (mfg. warrantee)	0.02167 (calc. frm F-factor)	0.52	190
PM ₁₀	7.5	0.0127	0.305	111
ROG	7.00	0.0119	0.285	104
SOx	0.60	0.001	0.024	9

Total Post modification combustion pollutants from 3 heaters

CO	0.0861	2.066	754
NOx	0.06587	1.581	577
PM ₁₀	0.0153	0.366	133
ROG	0.0143	0.343	125
SOx	0.0012	0.0288	11

Table 9:-Total ROG emissions(tanks + Fugi. + heaters) Modified Roosa Permit unit [A/N 522642]

source	ROG Emissions			
	lbs/hr, uncntrl. [cntrl]	lbs/day, uncntrl. [cntrl]	30-day avg. lbday	lbs/yr
Tanks	1.894 [0.0946]	45.46 [2.28]	2	830
Fugitive	0.103	2.48	3	905
3 heaters (D12, D46, D47)	0.0143	0.343	0	125
Total	2.011 [0.2119]	47.94 [5.10]	5	1860

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Table 10 - HAP Emissions from the Roosa's New Heaters (2 mmbtu/hr (0.001695 mmcf/hr))

Toxicant	Emission Factor lb/mmcf	Emissions	
		lb/hr	lb/yr
Acetaldehyde	4.30E-03	0.729E-05	0.0638
Acrolein	2.70E-03	0.458E-05	0.0401
Benzene	8.00E-03	0.136E-04	0.119
Ethyl benzene	9.50E-03	0.161E-04	0.141
Formaldehyde	17.00E-03	0.288E-04	0.252
Hexane	6.30E-03	0.107E-04	0.0935
Naphthalene	0.30E-03	0.508E-06	0.00445
PAH (- naphthalene)	0.10E-03	0.169E-06	0.00148
Propylene	0.731E+00	0.1239-02	10.85
Toluene	36.60E-03	0.62E-04	0.543
Xylene	27.20E-03	0.461E-04	0.404

Emission Factors from Ventura County AB 2588 Data Table, May 17, 2001

HAP Emission rate, lb/hr = EF (lb/mmcf) x heat input (0.001695 mmcf/hr),

lb/yr = lb/hr x 8760 hrs/yr

Toxic Analysis for Roosa Lease modification:

The proposed modification [removal of Tank, D11, 2 new heaters and more fugitive components] has resulted in ROG emission decrease of 108 lbs/yr from tanks and increase of 49 lbs/yr of TOG from fugitive components. Based on gas analysis and default toxic air contaminant (TAC) values for crude oil, applicant has estimated the TAC emissions from tanks and fugitives. Applicant has performed health risk analysis from the total TAC emissions increase from tanks, fugitives and TACs from 2 new heaters. The table below shows the summary of this analysis [details are given in applicant provided data in Appendices 6 and 7].

Table 11:- Roosa Toxic Analysis Summary [Tanks, Heaters and Fugitives]

Toxicant	Screening Level		Emissions		Pollutant Screening Level	
	Acute	Cancer/chronic	lb/hr	lbs/yr	Acute	Cancer/chronic
	lb/hr @ 100 Meters	lb/yr @ 100 Meters				
Acetaldehyde		8.92E+01	0.729E-05	0.0638	n/a	7.16E-04
Acrolein	5.09E-04	1.55E+01	0.458E-05	0.0401	8.99E-03	2.59E-03
Benzene	3.96E00	8.92E+00	0.544E-04	0.479	1.38E-05	5.37E-02
Ethyl benzene		5.17E+05	-0.177E-04	-0.155	n/a	-3.0E-07
Formaldehyde	2.52E-01	4.25E+01	0.288E-04	0.252	1.14E-04	5.94E-03
Hexane		1.81E+06	-0.388E-04	-0.340	n/a	-1.88E-07
Naphthalene		7.44E+00	0.508E-06	0.00445	n/a	5.99E-04
PAH (- naphtha.)		7.69E-03	0.169E-06	0.00148	n/a	1.93E-01
Propylene		7.75E+05	0.1239-02	10.85	n/a	1.40E-05
Toluene	9.91E+01	7.75E+04	0.772E-04	0.676	7.79E-07	8.72E-06
Xylene	5.89E+01	1.81E+05	-0.551E-04	-0.482	-9.35E-07	-2.67E-06
Application Screening Index =					0.0091	0.2566

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Table 11:- Post Modification Fugitive VOC Emissions: Vapor Recovery (Gas Collection) System (A/N 522644)

Components	Total Count [delta increase]	Emission Factor lb/hr/source	Emissions [delta increase]		
			lb/hr	lb/day	lb/yr
Connectors, Gas/Lt. Liquid	370/[56]	2.70E-05	0.00151	0.0036	13.2
Connectors, Lt. Crude	42/[0]	4.71E-06	0	0	0
Flanges, Gas/Lt. Liquid	13/[0]	1.33E-05	0	0	0
Others, Gas/Lt. Liquid	21/[7]	1.03E-03	0.00718	0.172	62.9
Other, Lt. crude	3/[0]	6.20E-05	0	0	0
Valves, Gas/Lt. Liquid	34/[9]	1.65E-05	0.00015	0.004	1.3
Valves, Lt. Crude	7/[0]	8.98E-06	0	0	0
Total post modification fugitive VOC emission			0.00884	0.212	77.4

Note:- The above fugitive emissions data in Table 11 is provided by the applicant (please see the details in the folder, Appendix 5 dated 04/13/2011). The emission factors are based on Maximum Weighted Average Quarterly Emission Factors. Existing fugitive emission [from the previous permit (A/N 501756)] = 718 lbs/yr

Modified permit unit's total fugitive emissions = 718 + 77 = **795 lbs/yr = 2.18 lb/day = 0.091 lb/hr**

Tank Truck Loading Losses: [A/N 522643]

Existing: Loading Limit 476 bbl/day max.

Assumption: 3 hrs/day total loading time for 3 tank trucks

Loading losses EF = 2 lbs/1000 gal (84 lbs/1000 bbl) loaded as per SCAQMD Form B8

Loading Losses (@ 476 bbl/day), uncntrl. = 84/1000 bbl x 476 bbl/day = 39.98 lb/day [13.33 lbs/hr]

Controlled losses = 39.98 x 0.05 = 1.999 lbs/day = 0.666 lb/hr

Proposed:-

Termo has requested to have tank truck loading amount increased to 700 bbl/day (monthly average) due to increased crude oil production. Max. daily loading 10 155 bbl tank trucks = 1,550 bbl/day

Loading losses EF = 2 lbs/1000 gal (84 lbs/1000 bbl) loaded as per SCAQMD Form B8

Loading losses (uncontrolled) = 84 lbs/1000 bbl x 1,550 bbl/day = 130.2 lbs/day max

Loading losses per proposed limit of 700 bbl/day = 84 lbs/1000 bbl x 700 bbl/day = 58.8

Loading Losses (controlled) = 58.8 x 0.05 (95% VRS efficiency) = 2.94 lbs/day

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Per Rule R-462 for a Class A facility (loading more than 20,000 gallons per day), loading losses shall be 0.08 lbs/1000 gal (or 3.36 lbs/1000 bbl). For a max. loading rate of 700 bbl/day, the loading losses shall be 2.35 lbs/day. The loading losses of 2.94 lbs/day (with VRS @95%) are higher than the compliance limit of R-462. These calculations utilized a vapor recovery system efficiency of 95% which is the accepted figure for a typical oilfield facility. This efficiency represents the efficiency of the existing vapor recovery system prior to modification or without any further demonstration. In order to demonstrate compliance with the Rule 462 emission limit of 0.08 lbs/ 1000 gal, the applicant is proposing to perform an emissions test of the system (Refer to Appendix 8 of the application package). This is the same procedure that Termo's neighboring Oat Mountain facility is going through.

Applicant has provided the Toxicants' emission data from the fugitive sources of the above permit units; tanks and loading losses (see Appendix 6). Since these VOC emissions will have only benzene, ethyl benzene, hexane, toluene and xylene and their emission rates are insignificant, R-1401 compliance is expected.

RULES EVALUATION:

- RULE 212:** STANDARDS FOR APPROVING PERMITS: The public notice requirements of this rule shall not apply since this equipment will not be located within 1,000 feet from a school. Screening analysis (pollutants' Screening Index calculations as Per Tier I) of toxic air contaminant shows that the cumulative cancer/chronic hazard and the acute hazard indices are less than one.
- RULE 401:** With proper operation visible emissions are not expected.
- RULE 402:** NUISANCE: With proper operation, nuisance complaints are not expected.
- RULE 431.1:** The sulfur content of the gas supplied to the 4 heater treaters will meet the rule limit of 40 ppm (as per gas analysis, the sulfur content is not detected in Termo's produce gas.
- Rule 463:** All required tanks are connected to facility's vapor recovery system (95% efficient) and complies with rule requirements.

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Reg. IX: Std. of performance for New Stationary Sources:- The proposed equipment will comply with the applicable requirements of 40CFR Subpart KKK (std. of performance for equipment leaks from onshore natural gas processing plant). Applicability and standards for compliance with the subpart KKK call for fugitive VOC emissions control, monitoring, maintenance and records keeping requirements for all the fugitive components. Term currently follows the Rule 1173 compliance requirements as discussed under R-1173 evaluation and thus, satisfies the requirements of 40CFR60 Subpart KKK.

40 CFR 60 Subpart HH:- National Emission Std. for Hazardous Air Pollutants from Oil and Natural Gas production facilities:- This regulation's requirements are not applicable as this facility is not a major source of HAPs.

Reg. X: National Emissions Standards for Hazardous Air Pollutants (NESHAPS):- This regulation's requirements are not applicable as this facility is not a major source of HAPs.

Rule 1146.2: The new process heaters, each rated for 1 mmbtu/hr are Type 2 heaters per rule definition and comply with the CO emission limit of 400 ppm and NOx emission limits of 30 ppm [manufacturer warrantee :- CO emissions limit = 50 ppm and NOx emission limit of 9 ppm].

RULE 1173 The operator currently follows R-1173 compliance requirements including but not limited to the leak standards, identification requirements, inspection, monitoring, maintenance and records keeping procedures and will continue the same for the proposed gas plant.

REG XIII: NEW SOURCE REVIEW:

A/N 522640 (Del Aliso/Orcutt):- The ROG emission changes from the proposed modification [addition of new tanks (D11, D44, D45):- storage tanks' ROG emissions increase by one lb/day and the fugitive emissions increase is less than a lb/day (see Tables 1, 2 and 3 above)], Since the modified permit unit's tanks' ROG emission increase is about one pound per day, they are connected to vapor recovery system to comply with BACT and Rule 463 compliance. However, ROG emission of the modified unit (3 lbs/day, see Table 3) is within the facility's PTE threshold and thus offsets are not required. At present, there is no need for ROG emissions' modeling analysis.

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Reg. XIII contd.

A/N 522642 (Roosa):- The emission changes from the proposed modification:- [storage tanks' ROG emission decreases by a pound due to removal of the storage tank D11, Fugitive emission increase by 49 lbs/yr and there will be emission increase of all criteria pollutants due to the addition of 2 new heaters (See Tables 5, 6, 7, 8 and 9 above). The increase in emission of any criteria pollutant is less than a pound and thus, no NSR is triggered. The fugitive emission increase of each fugitive component is less than a pound/day and BACT is not triggered.

Both new heater treaters are exempt from permitting per R-219 and the pre/post emission changes are less than a pound per day.

A/N 522643 Tank truck loading:- Tank truck loading operation will have ROG emission increase due to higher throughput from 476 bbl/day to 700 bbl/day. [from 2 lbs/day to 3 lbs/day].

BACT for a Class A facility is to have VOC emission of 0.08 lbs/1000 gal. loaded, however, Termo's loading operation is a Class A operation. Termo's tank truck loading operation is not a rack and the loading is done from a 3" stand pipe by bottom loading method. The displaced organic vapor is returned to the vapor recovery system which is 95% efficient. The collected vapors are combusted in 4 micro-turbines and 2 process heaters and could even satisfy Class A level VOC emission requirement of 0.08 lb/1000 gal. loaded.

At present, there are no modeling requirements for the ROG emission increase [there is a ROG emission increase from tank truck loading operation as shown above].

Table 13:- Facility's PTE (after the modification)

Pollutant	4 turbines total lb/yr	Del Aliso and Roosa Heaters, lbs/yr	New Roosa Heaters, lbs/yr	Tk. Truck Loading, lbs/yr	Fugitive (Del Aliso, Roosa, VRS), lbs/yr	Storage Tanks, lbs/yr	Facility Total ton/yr
CO	1,324	208	650	----	----	----	1.09
NO _x	488	774	190	---	----	----	0.73
PM ₁₀	100	44	111	---	----	----	0.13
ROG*	172	42	104	858	305+40+856 +49+718+77 =2,045	781+830 =1,611	2.42
SO _x	28	4	9	---	----	----	0.02

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As the modified facility's total PTE is less than the amount in Table A [R-1304 (d)], it is exempt from the offset requirements of R-1303 (b)(2).

RULE 1401: NEW SOURCE REVIEW OF CARCINOGENIC AIR CONTAMINANTS: The toxicants' emissions are from fugitive sources and combustion of field gas in the two new heater treaters . Tier 1 risk assessment has been performed for a receptor at 100 meters distance and pollutant screening level indices for acute and chronic components are calculated for these sources which show that summation of each toxicant's pollutant screening level (PSLp) for acute and chronic compound is less than one. Please see Tables 4 and 11 above of this evaluation for details. Toxicants' emissions from the fugitive sources are quite insignificant and based on the heaters' Tier 1 analysis, it is assumed that summation of all PLSps will be less than one. This means that MICR and both the hazard indices will comply with the rule requirements.

Reg. XVII: PSD Analysis:- The addition of the 2 new tanks, 2 heater treaters and tank truck loading throughput do not result in an emission increase of 100 or 250 tons/yr of attainment air contaminants.

Reg. XX: Termo is not a RECLAIM facility. Facility's NOx and SOx emissions do not trigger the RECLAIM requirements.

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Reg. XXX: Termo was issued its Initial T-V permit on June 1, 2008 and it is valid through May 2013. The addition of 2 new tanks, 2 new heater treaters and increase in throughput of tank truck loading operation required Termo to file for T-V permit revision per R- 3002(a). Per R-3000 (b)(6), the modification is classified as De Minimus Significant permit revision as the criteria pollutants and HAP emission increases from all new and modified permit units are less than the values listed in Table 1 of this rule. The modification/installation has already taken place and Termo has filed the required applications per R-3003. Public participation per 3003 (i)(4) (B) is not required as per R-3006 (b). R-3003(i)(4)(C)- Notification requirement to the affected states is not necessary as the facility is not located within 50 miles of the nearby states. The modified facility complies with all applicable rules and regulations of the South Coast AQMD. The EPA administrator will be provided with the copy of the permit for a 45-day review as per R-3003(j). The revised T-V permit will be issued to Termo after completion of EPA review and required follow-up.

CONCLUSIONS AND RECOMMENDATIONS:

The proposed installation of the new tanks and heater treaters, and modification of the crude oil separation units and tank truck loading operation complies with all Rules and Regulations of the South Coast Air Quality Management District. A Permit to Operate is recommended. Refer to the Sample Facility Permit attached.